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(71) Applicant (for all designated States except US): AL-BERTA RESEARCH COUNCIL INC. [CA/CA]; 250 Karl Clark Road, Edmonton, Alberta T6N 1E4 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SARKAR, Partho [CA/CA]; #34 - 3221 - 119th Street, Edmonton, Alberta T6J 5K7 (CA). RHO, Hongsang [CA/CA]; 11004 - 11th Avenue NW, Edmonton, Alberta T6J 6M8 (CA). JOHAN-SON, Lorne [CA/CA]; 11324 - 111A Avenue, Edmonton, Alberta T5G 0E8 (CA). YAMARTE, Luis [CA/CA]; 10655 - 66th Ave. NW, Edmonton, Alberta T6H 1X5 (CA).

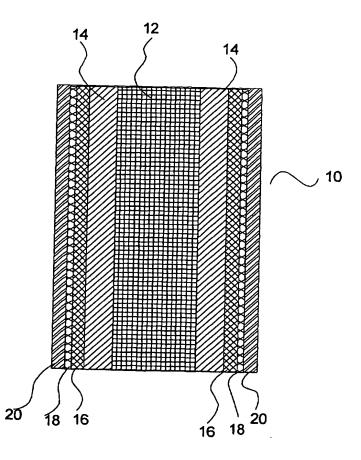
(74) Agent: LEE, Brian; c/o Gowling Lafleur Henderson LLP, 2300-1055 Dunsmuir Street, PO Box 49122, Vancouver, British Columbia V7X 1J1 (CA).

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(54) Title: METAL-SUPPORTED TUBULAR FUEL CELL



(57) Abstract: This invention relates to a method of manufacturing a metal-supported tubular micro-solid oxide fuel cell, and a fuel cell made from such method. The method comprises the steps of coating a wooden substrate member with a conductive substrate layer, coating the substrate layer with an inner electrode layer, coating the inner electrode layer with an electrolyte layer, drying and sintering the coated substrate member such that the substrate member combusts, coating the electrolyte layer with an outer electrode layer, and then drying and sintering the layers. The invention further relates to a method of manufacturing a tubular solid oxide fuel cell assembly comprising: a) coating a tubular substantially metallic support layer with a ceramic or cermet inner electrode layer, b) coating the inner electrode layer with a ceramic electrolyte layer; c) coating the electrolyte layer with a ceramic or cermet outer electrode layer, then d) sintering the layers to produce a hollow tubular metal-supported fuel cell; the electrode and electrolyte layers having a collective wall thickness of $80 \ \mu m$ or less, the support layer having sufficient mechanical strength to support the electrode and electrolyte layers and sufficient porosity to flow a reactant therethrough.